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BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000-1

DIRECT TESTIMONY
OF
CHRIS F. CAMPBELL
ON BEHALF OF
UNITED STATES POSTAL SERVICE

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1 DIRECT TESTIMONY

2 OF

3 CHRIS F. CAMPBELL

4 AUTOBIOGRAPHICAL SKETCH

5 My name is Chris F. Campbell. I am an Operations Research Specialist
6 in Special Studies at Postal Service Headquarters. Since joining the Postal
7 Service in 1998, I have worked on costing issues with a primary focus on Special
8 Services and Qualified Business Reply Mail.

9 Prior to joining the Postal Service, I worked as an Environmental Engineer
10 for the U.S. Environmental Protection Agency in Chicago. My work focused
11 primarily on Clean Air Act implementation in the State of Michigan.

12 I earned a Bachelor of Science Degree in Industrial Engineering from
13 Purdue University in 1992 and an MBA from the University of Michigan in 1998
14 with a concentration in Finance.

15 My appearance in this docket represents my first appearance before the
16 Postal Rate Commission (PRC).

17 I. PURPOSE OF TESTIMONY

18 The purpose of this testimony is to present estimated costs that provide a
19 foundation for the testimonies of several Postal Service rate design witnesses.

20 Section II presents estimated costs for a number of special services and
21 supports the testimony of Postal Service witness Mayo (USPS-T-39). The
22 special services covered are address correction service (manual and

1 automated), business reply mail (BRM), caller service, mailing list services,
2 Periodicals application, permit imprint, stamped cards, and Stamped Envelopes.

3 Section III presents the estimated mail processing cost avoidance of a
4 Qualified Business Reply Mail (QBRM) mail piece. This cost avoidance applies
5 to letters and cards and supports the testimony of Postal Service witness Fronk
6 (USPS-T-33) concerning QBRM.

7 Section IV presents updated cost estimates for three additional services.
8 First, cost estimates are provided for on-call and scheduled pickup service,
9 which support USPS witness Robinson (USPS-T-34). Secondly, Express Mail
10 rate category cost differential estimates are presented, supporting USPS witness
11 Plunkett (USPS-T-36). Lastly, cost estimates are provided for nonletter-size
12 business reply mail, which support USPS witness Mayo (USPS-T-39).

13 II. INFORMATION SOURCES

14 The following Docket No. R2000-1 Library References are associated with
15 my testimony:

- 16 • USPS LR-I-110
- 17 • USPS LR-I-160
- 18 • USPS LR-I-172

19 III. SPECIAL SERVICES

20 A. ADDRESS CORRECTION SERVICE

21 1. Scope of Analysis

22 This section provides estimates of the test year costs of providing manual
23 Address Correction Service per use and automated Address Change Service

1 (ACS) per use. These costs serve as a basis for the fees proposed by Postal
2 Service witness Mayo (USPS-T-39).

3 **2. Background**

4 Address Correction Service provides mailers with change of address
5 information for recipients who have moved. Address correction notifications are
6 sent to mailers through one of two methods: (1) manual Address Correction
7 Service or (2) automated ACS. Manual Address Correction Service provides a
8 photocopy of the mail piece with the recipient's forwarding address on a USPS
9 Form 3547 card for First-Class Mail, Standard A, and Standard B mail. The
10 original mail piece is either forwarded to the recipient's new address or treated
11 as waste, depending on the sender's preference and/or the class of mail. For
12 Periodicals, the Postal Service provides mailers with the front cover of the
13 recipient's periodical, with the change-of-address label affixed on the cover
14 (known as Form 3579). The periodical is treated as waste. These activities are
15 conducted at a Computerized Forwarding System (CFS), normally housed within
16 a Processing and Distribution Center. The Postal Service charges a fee for each
17 address correction notification provided to a mailer.

18 ACS is an electronic notification service providing changes of address and
19 reasons for non-delivery. Users of this service access the data electronically via
20 a computer and modem. The Postal Service charges a fee for each address
21 correction and reason for non-delivery provided to the customer. ACS mail
22 pieces that are undeliverable are called "ACS nixie mail pieces."

3. Address Correction Service Cost Methodology

The test year cost estimates for manual Address Correction Service and automated ACS are derived separately using the costing methodologies presented below.

a. Manual Address Correction Service

The model developed to calculate test year cost estimates for manual Address Correction Service consists of a volume-weighted average of the cost of processing Forms 3547 (83.75%) and 3579 (16.25%). The average Form 3547 processing cost (47.0 cents) is a weighted average comprised of (1) Photo and Forward processing (46.04%); (2) Photo and Treat as Waste processing (10.20%); and (3) On-Piece Correction processing (43.76%) (see USPS LR-I-160, Section A, page 2). The On-Piece Correction processing cost is assumed to be zero cents because these pieces would otherwise incur these costs outside of Address Correction Service. The average Form 3579 processing cost is 92.4 cents (see USPS LR-I-160, Section A, page 2). Both Form 3547 and Form 3579 costs incorporate (1) CFS costs; (2) mailstream costs; (3) accountable mail clerk costs; and (4) carrier delivery/collection of postage due costs. CFS costs, accountable mail clerk costs, and carrier delivery/collection of postage due costs were obtained from a 1999 study entitled "Volumes, Characteristics, and Costs of Processing Undeliverable-As-Addressed Mail." The spreadsheets from this study are found in USPS LR-I-110, updated with test year piggyback factors and wage rates. Mailstream costs were obtained from postal data (see USPS-T-29 Campbell Workpaper I).

b. Automated ACS

Estimated test year costs for automated ACS were developed using a volume-weighted average of regular ACS change-of-address (COA) notification costs (61.86%) and ACS nixie processing costs (38.14%) (see USPS LR-I-160, Section A, page 3). The average COA notification cost is a weighted average of the mechanized terminal unit keying cost (85%) and the non-mechanized terminal unit keying cost (15%). The average ACS nixie processing cost is the total unit cost of delivery unit handling and ACS nixie keying (reason for non-delivery). Any costs that would otherwise be incurred by an undeliverable mail piece have not been included in the cost methodology. All automated ACS costs were derived using data from the 1999 study identified above.

4. Address Correction Service Costs

The estimated test year cost for manual Address Correction Service is 54.4 cents per use (see USPS LR-I-160, Section A, page 2). The estimated test year cost for automated ACS is 13.1 cents per use (see USPS LR-I-160, Section A, page 3).

B. BUSINESS REPLY MAIL

1. Scope of Analysis

This section provides the test year volume variable cost estimates of counting, rating, and billing the BRM service, above and beyond the costs already attributed to the class of mail. Test year costs are presented for each of the current BRM fee categories, and for advance deposit account maintenance.

1 These costs serve as a basis for the fees proposed by Postal Service witness
2 Mayo (USPS-T-39).

3 **2. Background**

4 Business Reply Mail is a special service for First-Class Mail and Priority
5 Mail. A BRM customer designs and prints the mail piece (usually a postcard or
6 envelope) to be used by its customers, and pays the postage on any mail pieces
7 returned to it by those customers. There are currently three fee categories
8 associated with BRM, as described below.

9 Qualified Business Reply Mail pieces are those cards and 1- and 2-ounce
10 envelopes which are automation compatible, have both a Facing Identification
11 Mark (FIM) C and a unique ZIP+4 barcode, and have qualified for BRMAS¹
12 processing. QBRM users pay a per-piece fee in addition to postage.

13 QBRM customers maintain an advance deposit account, with a balance
14 sufficient to cover the projected postage due and per-piece fees for a specified
15 future period, and pay an annual advance deposit account fee.

16 Non-QBRM advance deposit BRM pieces are not required to qualify for
17 BRMAS processing, although these pieces are often prebarcoded. Like QBRM,
18 per-piece fees and postage due are deducted from an advance deposit account.
19 Non-QBRM advance deposit BRM customers pay a per-piece fee in addition to
20 postage.²

21 Non-advance deposit BRM pieces may or may not be automation
22 compatible or barcoded. Non-advance deposit BRM recipients do not pay the

¹ BRMAS refers to the Business Reply Mail Accounting System, which is discussed below.

1 postage due and per-piece fees through an advance deposit account. Instead,
2 these pieces are delivered to the BRM customer upon payment of postage and
3 fees due, which is either (a) collected by the carrier delivering this mail, (b)
4 collected by box section clerks, or (c) deducted from a Postage Due account.
5 Mailers receiving low volumes of BRM generally use non-advance deposit BRM.
6 Non-advance deposit BRM customers currently pay a 30-cent per-piece fee in
7 addition to postage.

8 **3. BRM Mail Flows**

9 To determine the counting, rating, and billing costs associated with QBRM
10 and BRM, it is necessary to focus on operations at the destinating facility. Here,
11 BRM letters and cards are generally held out in the Incoming Primary operation
12 and sent to either the BRMAS operation or to a manual sortation operation
13 (usually in the Postage Due Unit or Box Section). This flow differs from other
14 non-presort First-Class Mail letters and cards, which, after sortation in the
15 Incoming Primary operation, are processed in an Incoming Secondary operation
16 (either automated or manual), and are then sorted to address either in a Delivery
17 Point Sequence (DPS) operation or in a manual operation (i.e., cased by the
18 carrier).

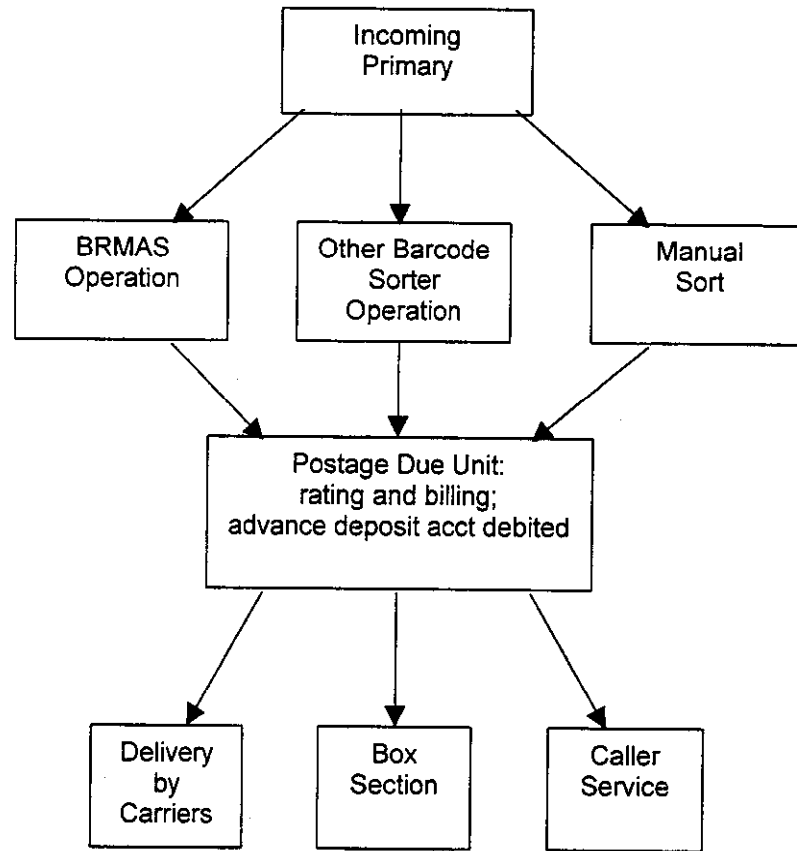
19 **a. Qualified BRM Pieces**

20 As shown in Figure 1, QBRM goes through the Incoming Primary
21 operation, and then can be sorted to permit number (corresponding to a unique
22 ZIP+4 Code) in a BRMAS or BCS operation. Because the ZIP+4 Code is unique

² With the exception of certain nonletter-size BRM, which qualifies for lower per-piece fees as a result of Docket Nos. MC99-1 and MC99-2.

1 to a BRM customer, this sort is equivalent to the level of sortation obtained in a
 2 DPS operation. These pieces avoid the Incoming Secondary distribution that
 3 other First-Class Mail pieces receive.

Figure 1: Advance Deposit BRM Mail Flow



4 BRMAS operations vary across facilities. Where utilized, the BRMAS
 5 accounting software is run on either a Delivery Barcode Sorter (DBCS) or a Mail
 6 Processing Barcode Sorter (MPBCS), as determined by the facility. In some
 7 cases, the BRMAS operation includes both "primary" and "secondary" sort
 8 schemes, in order to get all QBRM finalized to permit number. For these
 9 facilities, all QBRM arrives at the BRMAS operation mixed; on a "primary" sort
 10 scheme, some is sorted to permit number (for the highest volume mailers), and
 11 the rest is sorted to the secondary schemes. In the secondary sort schemes, the

1 mail is sorted to permit number for the rest of the QBRM. At other facilities, BRM
2 is sorted to BRMAS scheme on the Incoming Primary operation, so the BRM
3 receives only one handling in the BRMAS operation.

4 For those pieces finalized in the BRMAS operation, the BRMAS program
5 also performs counting and rating functions, and can provide a report for the
6 BRM recipient of postage due (i.e., a bill). BRMAS does not deduct the postage
7 due from the advance deposit account.

8 Even at facilities that sort BRM in a BRMAS operation, not all QBRM gets
9 finalized to permit number in the BRMAS operation. This results from
10 operational limitations (e.g., the number of bins available for sortation), pieces
11 being rejected (e.g., due to mechanical problems or piece characteristics), or
12 diversion of some BRM to other mail streams (e.g., mixing with other First-Class
13 Mail that got distributed in a DPS operation). These residual pieces are usually
14 sorted, counted and rated manually in the Postage Due Unit.

15 Even when all QBRM pieces for a mailer can be finalized in the BRMAS
16 operation, verification and accounting activities associated with these pieces are
17 performed in the Postage Due Unit.

18 Currently, for the reasons given above and because many facilities do not
19 have BRMAS software, only 14 percent of QBRM is counted and rated in a
20 BRMAS operation (see Docket No. R97-1, USPS LR-H-179, Table 13). At
21 facilities without BRMAS operations, QBRM is counted, rated and billed using a
22 variety of methods, both manual and automated. Manual counting is the most
23 common counting method, followed by use of end-of-run (EOR) report counts.

1 Rating and billing functions are typically performed manually or through the
2 PERMIT system or other software. (see Docket No. R97-1, USPS LR-H-179,
3 Tables 13, 16 and 18).

4 **b. Non-QBRM Advance Deposit BRM Pieces**

5 In general, non-QBRM advance deposit BRM pieces are diverted from the
6 First-Class Mail stream after the Incoming Primary operation, as shown in Figure
7 1 above. These pieces avoid the Incoming Secondary distribution that other
8 First-Class Mail pieces receive. These pieces can receive sortation to the mailer
9 in the Incoming Primary or BRMAS operations, but are typically sorted manually
10 in the Postage Due Unit (see Docket No. R97-1, USPS LR-H-179, Table 13). In
11 addition to manual distribution, the Postage Due Unit operation includes
12 counting, rating, billing, and accounting functions. These pieces are then picked
13 up at the Postage Due Unit by carriers or box section clerks for distribution to
14 customers (see Docket No. R97-1, USPS LR-H-179, Table 4).

15 In certain instances, non-QBRM advance deposit BRM pieces may
16 receive a sortation on a BCS before being sent to the Postage Due Unit. An
17 EOR report is used as a final count for some of these pieces, while others
18 receive a manual count in the Postage Due Unit. Rating and billing functions are
19 either performed manually or automatically through PERMIT or other software
20 packages.

21 **c. Non-Advance Deposit BRM Pieces**

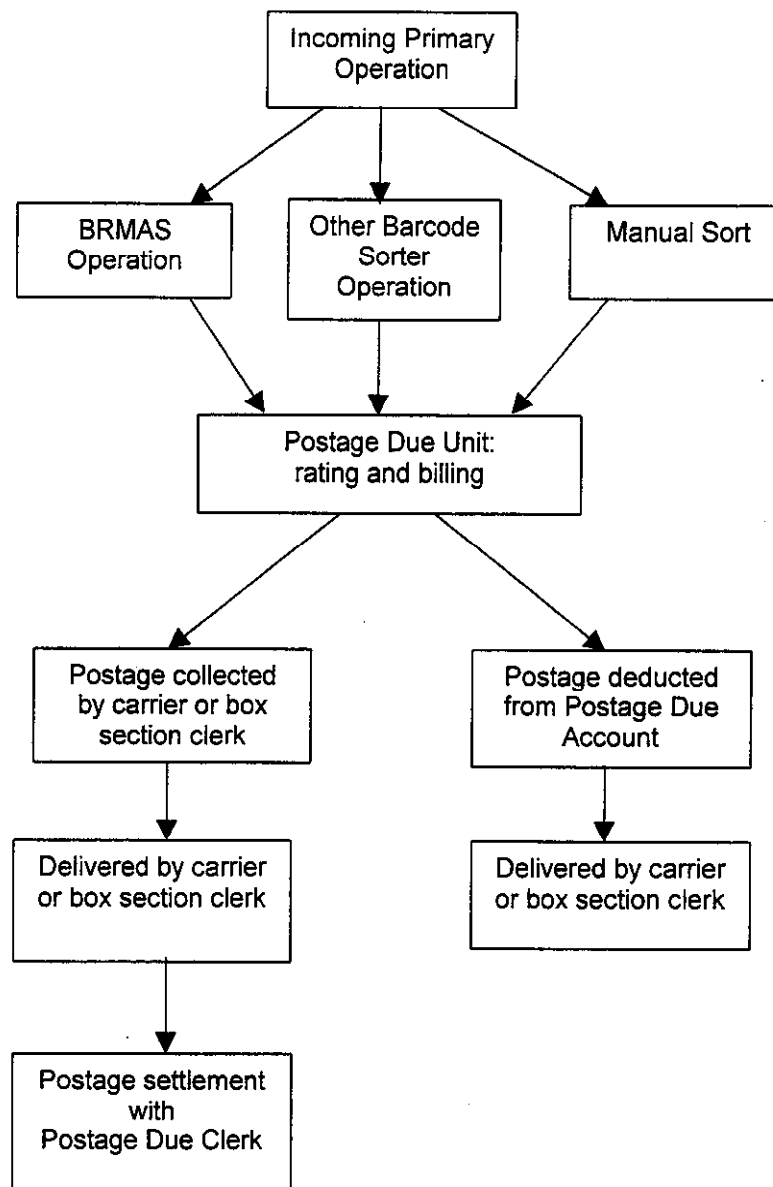
22 The manual or automation Incoming Secondary distribution operation is
23 avoided for non-advance deposit BRM. Instead, the following mail flow occurs:

(1) diversion to the Postage Due Unit, (2) manual distribution, (3) counting, rating, and billing functions (typically manual), (4) pick-up by carriers or box section clerks, (5) fee collection by carriers or box section clerks, and (6) accountability relief involving carriers or box section clerks (remitting fees collected) and postage due unit clerks (for accepting fee collections, or for deductions from Postage Due accounts). The distribution of collection methods used is shown in Docket No. R97-1, USPS LR-H-179, Table 5. The mail flow for non-advance deposit BRM is shown below in Figure 2.

d. Advance Deposit Accounts and BRM Permits

Other workload volume variable to BRM is associated with the administration of the advance deposit accounts set up for BRMAS-qualified and non-QBRM advance deposit BRM recipients. This workload includes determining whether adequate funds are on deposit to cover the postage due for future mail received, notifying the mailer of inadequate funds, deducting daily postage due from the account, and the initial set up of the advance deposit account. These activities are generally administered through the Postage Due Unit or the Business Mail Entry Unit (BMEU). An annual accounting fee is charged to cover these costs.

Each Business Reply Mail customer must obtain a permit to receive BRM. The administration of the BRM permit is similar to that of permits obtained for permit imprint mail of other classes.

Figure 2: Non-Advance Deposit BRM Mail Flow

4. Cost Methodology and Results

The cost methodology presented here was developed using the mail flows described above, as well as productivities developed from prior USPS witness testimony and data from a 1997 BRM Practices Study. In general, the cost methodologies for low-volume QBRM, non-QBRM advance deposit BRM, and

1 non-advance deposit BRM are similar to those presented by USPS witness
2 Schenk (see Docket No. R97-1, USPS-T-27), while the high-volume QBRM cost
3 methodology has been modified to reflect certain fixed costs associated with
4 large QBRM mailer volume.

5 **a. Qualified BRM**

6 The QBRM per-piece cost methodology presented by witness Schenk in
7 Docket No. R97-1 incorporated three components: (1) a marginal BRMAS
8 processing productivity, (2) a marginal BRMAS productivity for postage due
9 activities, and (3) a marginal manual sortation productivity for postage due
10 activities. A direct and indirect cost per piece was determined for each of these
11 components and weighted by volumes processed on BRMAS and by volumes
12 processed manually. An incoming secondary cost was then subtracted from the
13 cost per piece to avoid double counting the incoming secondary operation, which
14 is already included as a basis for QBRM postage.

15 The QBRM cost methodology presented here differentiates between
16 those costs associated with large-volume QBRM mailers and those associated
17 with small-volume QBRM mailers. The methodology isolates fixed costs from
18 those that are volume variable for high-volume mailers, resulting in a cost
19 structure similar to witness Schenk's methodology for nonletter-size BRM (see
20 Docket No. MC99-2, USPS-T-3). For low-volume QBRM customers, the
21 methodology remains relatively unchanged from the QBRM methodology
22 presented in Docket No. R97-1, resulting in per-piece costs only. These

1 methodological revisions set the stage for a QBRM fee structure that allows a
2 mailer to choose a fee structure based on its QBRM volume.

3 Further refinements have been incorporated based on data obtained from
4 the original Business Reply Mail Practices Study (Docket No. R97-1, USPS LR-
5 H-179) and a 1999 update (see Appendix 1 below).

6 **i. High-Volume QBRM Account Costs**

7 **a. Fixed Costs**

8 A number of mailers consistently receive high QBRM volumes nearly
9 everyday. We can safely assume that some costs incurred by the Postal Service
10 as a result of high-volume customers are fixed in nature. More specifically, the
11 costs of rating, preparing meter readings, and completing postage due forms are
12 incurred each time a QBRM account requires a transaction, regardless of the
13 QBRM volume or the method used (manual or automated). For example, if a
14 QBRM account receives 1,000 QBRM pieces, the time required to generate a bill
15 is the same as if the account receives 10,000 pieces. Similarly, rating 1,000
16 QBRM pieces (i.e., calculating postage due given a piece-count) requires the
17 same amount of time as rating 10,000 QBRM pieces.

18 As a consequence, productivities for rating and billing activities, previously
19 part of per-piece costs, have been isolated and incorporated into a monthly fixed
20 cost (see USPS LR-I-160, Section B, page 1) for each high-volume QBRM
21 account. The cost per transaction for QBRM pieces rated and billed manually is
22 derived from 1989 survey data³ (see USPS-T-29 Campbell Workpaper II).

³ Field observations confirmed that manual billing and rating productivities have not changed significantly since 1989.

1 These data include times for manually rating QBRM pieces, preparing meter
2 strips, and completing a postage due form for each QBRM account. Rating and
3 billing costs for QBRM pieces rated and billed using the PERMIT system or other
4 software are incorporated using the time for manually completing a postage due
5 form as a proxy. Any costs incurred by QBRM pieces rated and/or billed using
6 BRMAS software are not incorporated into the methodology. These costs would
7 otherwise be subtracted out as duplicative incoming secondary activities.

8 The last step in calculating a fixed cost per QBRM account requires
9 weighting the above costs, based on QBRM volume processed using each rating
10 and billing method. The 1997 BRM Practices Study provides data showing how
11 bills are generated (see Docket No. R97-1, USPS-LR-H-179, Table 16) and
12 could be used to weight these costs. However, because there has been an
13 increase in PERMIT system usage for generating bills since 1997, the Practices
14 Study Table 16 has been updated with 1999 data (see Appendix 1 below). The
15 update revealed the following QBRM volumes billed using each method: 45.9
16 percent using manual or other method, 47.6 percent using PERMIT or other
17 software, and 6.5 percent using BRMAS.

18 Based on the above costing methodology and an average 15 account
19 transactions per accounting period,⁴ the volume-weighted fixed cost per high-
20 volume QBRM account is estimated to be \$232.13 per month.

⁴ This number is based on those BRMAS accounts showing activity in PERMIT during FY98 (AP1 through AP9).

b. Per-Piece Costs

While QBRM rating and billing costs are fixed with each high-volume account transaction, distribution costs (i.e., sorting and counting) vary directly with QBRM volume and should be attributed on a per-piece basis similar to the methodology presented by witness Schenk in Docket No. R97-1. The QBRM per-piece cost is based on the direct and indirect distribution cost per piece, less an incoming secondary cost to avoid double counting (see USPS LR-I-160, Section B, page 2). The distribution cost for manual counting is derived from survey data found in Docket No. R90-1, USPS-T-23, Exhibit USPS-23F.⁵ Sorting and counting costs for BCS/BRMAS (assumed to occur simultaneously on the BCS) are not incorporated into the methodology because these costs would otherwise be subtracted out as duplicative incoming secondary activities. The only incoming secondary cost subtraction incorporated into the methodology is for those QBRM pieces that are manually sorted and counted.

I make a number of refinements to witness Schenk's Docket No. R97-1 testimony (USPS-T-27). For instance, I modify her QBRM cost methodology to reflect the processing of BRMAS QBRM pieces on "other bar code sorters" in response to MPA witness Glick's cost analysis (MPA-T-4) in Docket No. R97-1. The Commission accepted witness Glick's adjustment in its recommended decision (see PRC Op. R97-1, page 319). The methodology now incorporates data from the 1997 BRM Practices Study showing that 19.3% of QBRM pieces receive final piece counts from a BCS EOR report (see Docket No. R97-1, USPS

⁵ Field observations confirmed that the manual distribution productivity has not changed significantly since 1989.

1 LR-H-179, Table 13). Further, the methodology now incorporates data from the
2 Practices Study specifying the method and finest depth of sortation of BRM (see
3 Docket No. R97-1, USPS LR-H-179, Table 8) which is reflected in the incoming
4 secondary cost subtraction.

5 Other refinements I make to witness Schenk's methodology include (1)
6 correcting understated postage due productivities and (2) adjusting volume
7 variability for Postage Due Unit activities to 100 percent, up from 79.7 percent in
8 Docket No. R97-1. The productivity correction lowers costs relative to Docket
9 No. R97-1, while higher volume variability has the opposite effect.

10 The above refinements to the QBRM cost methodology result in a QBRM
11 per-piece volume variable cost estimate of 2.00 cents for large-volume
12 customers (see Table 1 and USPS LR-I-160, Section B, page 2).

13 **ii. Low-Volume QBRM Account Costs**

14 In contrast to high-volume QBRM accounts, a significant number of
15 QBRM accounts receive low volumes of QBRM pieces over a period of time.
16 The costs of activities associated with these mail pieces are driven mostly by
17 volume. The mailer may go for several days without receiving any QBRM
18 pieces. When a QBRM piece is ultimately received at the destinating facility,
19 counting, rating, and billing activities are conducted on an as-needed basis. The
20 costs of these activities can be estimated using witness Schenk's Docket No.
21 R97-1 cost methodology for QBRM on a per-piece basis. Cost estimates for
22 counting and rating activities are estimated exactly the same as the high-volume

1 accounts, while the cost methodology for billing and rating reflects no fixed costs
2 as discussed below.

3 The QBRM per-piece cost is based on direct and indirect distribution,
4 rating, and billing costs per piece, less an incoming secondary cost to avoid
5 double counting (see USPS LR-I-160, Section B, page 3). The costs for manual
6 counting, rating, and billing are derived from productivities found in Docket No.
7 R90-1, USPS-T-23, Exhibit USPS-23F. These productivities reflect 100 percent
8 volume variability for Postage Due activities, up from 79.7 percent in Docket No.
9 R97-1. As indicated above, higher volume variability tends to increase costs
10 relative to Docket No. R97-1 costs. Sorting and counting costs for BCS/BRMAS
11 (assumed to occur simultaneously on a BCS) are not incorporated into the
12 methodology because these costs would otherwise be subtracted out as
13 incoming secondary activities. The only incoming secondary cost subtraction
14 incorporated into the methodology is for those BRM pieces that are manually
15 counted.

16 As discussed above, I make a number of refinements to witness Schenk's
17 Docket No. R97-1 approach. I modify her QBRM cost methodology to reflect the
18 processing of BRM pieces on "other bar code sorters", as did the Commission.
19 See PRC Op. R97-1, page 319. The methodology now incorporates data from
20 the 1997 BRM Practices Study showing that 19.3% of QBRM pieces receive final
21 piece counts from a BCS EOR report (see Docket No. R97-1, USPS LR-H-179,
22 Table 13). The methodology also incorporates data from the Practices Study
23 specifying the method and finest depth of sortation of BRM (see Docket No.

1 R97-1, USPS LR-H-179, Table 8) which is reflected in the incoming secondary
2 cost subtraction. Other refinements made to witness Schenk's methodology
3 include correcting understated postage due productivities and incorporating
4 updated rating and billing data (see Appendix 1).

5 The above refinements to the QBRM cost methodology result in a QBRM
6 per-piece volume variable cost estimate of 4.79 cents for low-volume QBRM
7 accounts (see Table 1 and USPS LR-I-160, Section B, page 3).

8 **b. Non-QBRM Advance Deposit BRM**

9 The cost methodology presented by witness Schenk in Docket No. R97-1
10 for non-QBRM advance deposit BRM has been refined using data from the 1997
11 BRM Practices Study and the 1999 update (see Appendix 1), as well as
12 productivities developed from a 1989 BRM cost study⁶ (see Docket R90-1,
13 USPS-T-23, Exhibit USPS-23F).

14 Like the low-volume QBRM accounts, the non-QBRM advance deposit
15 BRM per-piece cost is based on direct and indirect distribution, rating, and billing
16 costs per piece, less an incoming secondary cost (see USPS LR-I-160, Section
17 B, page 4). Again, the costs for manual counting, rating, and billing are derived
18 from productivities found in Docket No. R90-1, USPS-T-23, Exhibit USPS-23F.
19 These productivities reflect 100 percent volume variability for Postage Due
20 activities. Distribution costs for BCS/BRMAS are not incorporated into the
21 methodology because these costs would otherwise be subtracted out as
22 incoming secondary activities. The only incoming secondary cost subtraction

⁶ Field observations confirmed that these productivities have not changed significantly since 1989.

1 incorporated into the methodology is for those BRM pieces that are manually
2 counted.

3 Several refinements have been made to witness Schenk's Docket No.
4 R97-1 testimony for non-QBRM advance deposit BRM pieces. The cost
5 methodology has been modified to reflect the processing of BRM pieces on
6 "other bar code sorters", in accordance with PRC Op. R97, page 319. The
7 methodology now incorporates data from the 1997 BRM Practices Study
8 showing that 9.1% of non-QBRM advance deposit BRM pieces receive its final
9 piece count from a BCS EOR report (see Docket No. R97-1, USPS LR-H-179,
10 Table 13). The methodology also incorporates data from the Practices Study
11 specifying the method and finest depth of sortation of BRM (see Docket No.
12 R97-1, USPS LR-H-179, Table 8) which is reflected in the incoming secondary
13 cost subtraction.

14 Other refinements made to witness Schenk's methodology include
15 correcting understated postage due productivities and incorporating updated
16 rating and billing data (see Appendix 1).

17 These refinements to the QBRM cost methodology result in a non-QBRM
18 advance deposit BRM per-piece volume variable cost estimate of 7.42 cents
19 (see Table 1 and USPS LR-I-160, Section B, page 4).

20 **c. Non-Advance Deposit BRM**

21 The cost derivation for non-advance deposit BRM is shown in USPS LR-I-
22 160, Section B, pages 5-9. In addition to the distribution, rating, and billing costs
23 that other non-QBRM BRM pieces incur, non-advance deposit BRM pieces incur

costs associated with postage and fee collection. These fees are either collected by carriers or box section clerks, or are deducted from Postage Due accounts. I rely upon the distribution of fee collection methods determined in the BRM Practices Survey (Docket No. R97-1, USPS LR-H-179, Table 5). I estimate the net volume variable cost of a non-advance deposit BRM piece to be 26.7 cents (see Table 1 and USPS LR-I-160, Section B, page 6).

d. Advance Deposit Account

The derivation of the estimated cost for the maintenance of the advance deposit account is shown in USPS LR-I-160, Section B, page 10. The annualized cost per advance deposit account is estimated to be \$315.22 (see Table 1 below).

The productivity used in this model was obtained from the results of a 1997 BRMAS cost survey (see Docket No. R97-1, USPS-T-27, Appendix 1). There have been no significant operational changes since 1997, so the 1997 productivity is presumed current.

Table 1 Test Year BRM Costs

FEE CATEGORY	EST. TY COSTS
QBRM	
High-volume	\$0.020 per piece \$232.10 per month
Low-volume	\$0.048 per piece
Non-QBRM Adv. Deposit	\$0.074 per piece
Non-adv. Deposit	\$0.27 per piece
Adv. Deposit Acct	\$315.18 per year

C. CALLER SERVICE

1. Scope of Analysis

This section provides the test year cost estimate of providing Caller Service to a single caller service separation (i.e., caller number), as well as the test year cost estimate of providing a reserved caller number. These cost estimates are derived from a 1999 Caller Service Study (see Appendix 2) and serve as the basis for the fees proposed by Postal Service witness Mayo (USPS-T-39).

2. Background

Caller Service allows an individual or firm to pick up its mail one or more times per day at a caller window or loading dock. Banks, insurance companies, and other financial institutions are examples of customers that use this premium service over free carrier mail delivery. The service allows these customers to receive cash payments and other time-sensitive mail as soon as they become available without waiting for carrier delivery. Other Caller Service customers include small businesses and post office box customers whose mail volume exceeds the largest post office (P.O.) box capacity.

A customer using Caller Service is assigned a "phantom" P.O. box number that is used for mail sortation purposes (i.e., the box does not physically exist). The Caller Service customer is currently charged a semi-annual fee for each P.O. box number or separation. Upon payment of an annual fee, the Postal Service allows customers to reserve caller box numbers for future use.

1 When a reserved caller box number is activated, the customer is assessed the
2 semi-annual caller service fee.

3 3. Caller Service Costs

4 The test year cost estimate for Caller Service is based on a 1999 cost
5 study (see Appendix 2) which supersedes the last study conducted in 1980.

6 The Caller Service study consisted of two phases. The first phase
7 requested Caller Service customer lists from 132 post offices. About 30 percent
8 of these sites had no caller service customers and were eliminated from the
9 study's second phase of data collection. Phase II sites were then asked to
10 collect and record various Caller Service data over a one-week period. About 80
11 percent of the Phase II sites surveyed responded, resulting in 67 data collection
12 sites.

13 The Phase II survey contained four parts, each corresponding to specific
14 Caller Service information. The purpose of Part 1 was to collect basic Caller
15 Service data, including the total number of Caller Service customers and
16 separations at each site, as well as the pick-up frequency of Caller Service
17 customers. Part 2 requested that each site record the total storage space
18 required for Caller Service mail. Storage areas included tables, pouch racks,
19 hampers, cases, and floor space (platform and box section). These data were
20 used to calculate an annual cost of storage per caller number (see USPS LR-I-
21 160, Section C, page 5). Part 3 requested participants to record volume and
22 time information related to Caller Service billing and rent collection (i.e.,
23 accounting). These data were used to calculate an annual window accounting

1 cost per caller number (see USPS LR-I-160, Section C, page 3). In Part 4, each
 2 site recorded the total time required to retrieve mail for 10 Caller Service
 3 customers randomly selected from each site's Caller Service customer list.
 4 These data were used to calculate the annual retrieval cost per caller number
 5 (see USPS LR-I-160, Section C, page 4).

6 4. Cost Study Results

7 The estimated test year costs resulting from the Caller Service Study are
 8 shown in Table 2 below. The estimated test year cost per caller box number is
 9 \$596.04 per year (see USPS LR-I-160, Section C, page 2). The estimated test
 10 year cost per reserved caller number is \$16.57 (window service accounting costs
 11 are used as a proxy).

Table 2 Test Year Caller Service Costs

Activity	Annual Cost (direct and indirect)
Window Service Accounting	\$16.57
Window Service Delivery	\$177.86
Platform Delivery	\$292.77
Storage	\$108.85
Total Cost per Caller Number	\$596.04

D. MAILING LIST SERVICES

1. Correction of Mailing Lists

a. Scope of Analysis

This analysis updates the estimated test year cost of correcting a mailing list submitted to the Postal Service by a customer. This cost serves as a basis for the fee proposed by Postal Service witness Mayo (USPS-T-39).

b. Background

Correction of Mailing Lists is a service used primarily by small businesses to improve the accuracy of their mailing lists. A mailer typically presents a mailing list to the Postal Service via an Address Management System (AMS) unit either on cards or sheets of paper separated by ZIP Code. The AMS unit enters the customer name into a log, corrects any apparent address errors, and then forwards the list to individual post offices for correction. At each post office, the mailing list is circulated among carriers for manual correction and then returned to the AMS unit upon completion. The AMS unit confirms completion and returns the corrected list to the customer. Currently, the Postal Service charges a fee for each name on the mailing list.

c. Cost Methodology

The cost methodology presented in USPS LR-I-160 is relatively unchanged from the methodology presented in Docket No. R97-1 (USPS-LR-H-107). The cost methodology presented here, however, incorporates AMS handling costs that were not included in the past. The AMS units not only

1 distribute mailing lists to individual post offices, but also make corrections when
2 possible.

3 **d. Cost Results**

4 The estimated test year cost per name on a mailing list is 22.6 cents (see
5 USPS LR-I-160, Section D, page 1).

6 **3. ZIP Coding of Mailing Lists**

7 **a. Scope of Analysis**

8 This analysis updates the estimated test year cost of providing ZIP Coding
9 of Mailing Lists. This cost serves as a basis for the fee proposed by Postal
10 Service witness Mayo (USPS-T-39).

11 **b. Background**

12 ZIP Coding of Mailing Lists is a service that allows mailers to submit
13 mailing lists on index cards for ZIP Code sortation. A fee is charged for every
14 1,000 addresses on the mailing list.

15 **c. Cost Methodology**

16 The cost methodology presented in USPS LR-I-160 is the same as found
17 in Docket No. R97-1 using updated piggyback factors and wage rates (see
18 USPS LR-I-160, Section E, page 1).

19 **d. Cost Results**

20 The estimated test year cost for ZIP Coding of Mailing Lists is \$69.41 per
21 1,000 cards.

E. PERIODICALS APPLICATION

1. Scope of Analysis

This analysis updates test year costs as they relate to handling Periodicals applications for original entry, additional entry, re-entry, and newsagents. These costs serve as a basis for the fees proposed by Postal Service witness Mayo (USPS-T-39). The last update to the Periodicals Application study was presented in Docket No. R97-1 (see Docket No. R97-1, USPS LR-H-107).

2. Background

a. Application for Original Entry

Before a publication will be considered for Periodicals authorization, the publisher at a post office must file a Periodicals Application for Original Entry (Form 3501) where the publisher is located. Upon receipt, the Postmaster or other postal employee visits the publisher's office to verify information provided in the application. The post office then sends the application to the district office for initial review and processing. Following an initial review, the district office forwards the application to a Regional Customer Service Center (RCSC) for a detailed review and coordination with the Library of Congress. An RCSC analyst issues an approval or denial based on the above analyses.

b. Application for Reentry

An Application for Reentry must be filed on Form 3510 at the post office where the publisher is located whenever the name, frequency of issuance, or location of the known office of publication or qualification category is changed.

1 The application is forwarded by the local post office to the RCSC in Memphis,
2 where a complete review is conducted. Following review, the application is
3 returned to the origin post office for publisher notification.

4 **c. Application for Additional Entry**

5 The publisher must file an Application for an Additional Entry at the post
6 office where the publication received initial authorization. If the request is
7 submitted in conjunction with an Application for Original Entry, then the review
8 process follows that of the original entry application. If the request is a stand-
9 alone document, however, the review is performed at the RCSC.

10 **d. Periodicals Mailing Privileges for Newsagents**

11 Newsagents are persons or concerns selling two or more Periodicals
12 published by more than one publisher. Newsagents must be authorized by the
13 Postal Service before mailing at the Periodicals rates. Each newsagent must
14 furnish postmasters with evidence that the publications offered for mailing are
15 entitled to Periodicals rates and that they are sent to actual subscribers or other
16 newsagents for the purpose of sale. A Periodicals permit imprint is sufficient
17 evidence that a publication is entitled to Periodicals rates.

18 **3. Periodicals Application Model Update**

19 The cost methodology for Periodicals Applications remains largely
20 unchanged from the Docket No. R97-1 methodology (see Docket No. R97-1,
21 USPS LR-H-107), with two exceptions. (1) Headquarters personnel no longer
22 review Periodicals Applications unless under appeal (less than 5 percent are
23 appealed). Instead, the applications are sent to an RCSC for review. (2) Unlike

1 Original Entry and Newsagent applications that are reviewed by Postal Service
2 analysts, contract employees now review Additional Entry and Reentry
3 applications. The wages paid to contract employees have been incorporated
4 into the model at \$15.14 per hour. See USPS LR-I-160, Section F, page 1 for
5 the Periodicals Application cost model.

6 **4. Cost Model Results**

7 Estimated test year costs for Periodicals applications are shown in
8 Table 3 below.

Table 3 Test Year Periodicals Application Costs

Periodicals Application Type	Total Test Year Cost per Application
Original Entry	\$297.69
Reentry	\$29.76
Additional Entry	\$40.50
Newsagent	\$21.88

9 **F. PERMIT IMPRINT**

10 **1. Scope of Analysis**

11 This section provides a test year cost estimate for processing a Permit
12 Imprint Application. This cost serves as a basis for the fee proposed by Postal
13 Service witness Mayo (USPS-T-39).

14 **2. Background**

15 Mailers of all classes may apply to use a Permit Imprint instead of affixing
16 postage stamps or meter strips onto mail pieces. The mailer must obtain a
17 permit at the post office where the mailings will be made by completing Form

1 3615, Mailing Permit Application and Customer Profile. A one-time fee is
2 charged for the permit.

3 **3. Cost Methodology**

4 The cost methodology for estimating Permit Imprint Application costs
5 remains unchanged from the methodology presented in Docket No. R97-1,
6 USPS LR-H-107. In general, the total permit application cost is comprised of
7 three activities: (1) permit issuance, (2) literature and pamphlets, and (3) permit
8 revocation.

9 **4. Cost Results**

10 The estimated test year cost per permit application is \$104.05. See
11 USPS LR-I-160, Section G, page 1 for the Permit Imprint cost model.

12 **G. STAMPED CARDS**

13 **1. Scope of Analysis**

14 This section provides test year cost estimates for Stamped Cards. These
15 costs serve as a basis for Stamped Card fees proposed by Postal Service
16 witness Mayo (USPS-T-39).

17 **2. Background**

18 Stamped Cards allow firms and individuals to purchase cards already
19 embossed with postage for the First-Class Mail single card rate. Presently, four
20 types of Stamped Cards are available: (1) single-cut, (2) single-sheet, (3) reply
21 card, and (4) banded.

1 Stamped Cards may be purchased in bulk or in single units through post
 2 offices and the Philatelic Fulfillment Service Center (PFSC) in Kansas City.
 3 Postal vending machines sometimes offer stamped cards for purchase in
 4 banded packs.

5 All stamped cards are produced and distributed by the U.S. Government
 6 Printing Office (GPO) in Washington, D.C. The GPO enters Stamped Card
 7 cartons into the mailstream in quantities of 2000, 5000, and 10,000, depending
 8 upon the card type. The current contracted prices are effective through the end
 9 of fiscal year 2000.

10 3. Stamped Card Costs

11 Test year costs for Stamped Cards are based solely on contract prices
 12 negotiated with the U.S. Government Printing Office. These costs include
 13 materials, printing, and distribution. Table 4 below shows a cost per thousand
 14 cards (contract price) and a cost per card.

Table 4 Test Year Stamped Card Costs

Stamped Card Style	Cost per Thousand	Cost per Card
Single Cut	\$14.00	\$0.014
Single Sheet	\$14.00	\$0.014
Reply Card	\$28.00	\$0.028
Banded	\$31.00	\$0.031

15 H. STAMPED ENVELOPES

16 1. Scope of Analysis

17 This section provides test year cost estimates for Stamped Envelopes.
 18 Test year costs are presented for each Stamped Envelope category, both plain

1 and printed (i.e., personalized). These costs serve as a basis for the fees
2 proposed by Postal Service witness Mayo (USPS-T-39).

3 2. Background

4 The Stamped Envelope Program allows firms and individuals to purchase
5 envelopes already embossed with postage for the basic First-Class Mail rate.
6 Presently, two types of Stamped Envelopes are available to the public: (1)
7 envelopes with a printed return address (printed) and (2) envelopes without a
8 printed return address (plain). Each is available with or without a window in sizes
9 6-3/4 and 10 inches.

10 Plain Stamped Envelopes may be purchased in bulk (lots of 500) for a
11 discount or in single units through post offices and the Philatelic Fulfillment
12 Service Center (PFSC) in Kansas City. Postal vending machines sometimes
13 offer plain Stamped Envelopes for purchase in banded packs of five. Printed
14 envelopes may be ordered in bulk (lots of 50 or 500) through the PFSC. The
15 order is then fulfilled and shipped directly to the customer by the manufacturer,
16 Westvaco Inc., located in Williamsburg, Pennsylvania.

17 The Stamped Envelope contract between the Postal Service and
18 Westvaco is three years in length, with two one-year extension options. The
19 current contract ends June 30, 2000. The Postal Service expects to begin
20 accepting bids for the next three-year contract in early 2000.

3. Stamped Envelope Cost Model

The Stamped Envelope cost model presented in this testimony consists of three components: (1) manufacturing costs, (2) distribution costs, and (3) selling costs. Each component is discussed briefly below.

a. Manufacturing Costs

The manufacturing cost of a Stamped Envelope is equivalent to the negotiated contract price or the amount actually paid by the Postal Service to Westvaco for each envelope. Manufacturing costs are negotiated on an annual basis and specified in the contract between the Postal Service and Westvaco by item number.

Contract prices are not available for the test year because the Postal Service does not yet have a contract in place for fiscal year 2001. Instead, the negotiated contract prices for the period July 1, 1999 through June 30, 2000 are used in this testimony as proxies (see USPS LR-I-160, Section H, pages 1 and 2 for FY 2000 contract prices). As a general rule, the Postal Service is unable to incorporate exact test year contract prices into the Stamped Envelope cost model because manufacturing costs are unknown at the time of a rate case filing. This fact could be problematic, particularly if a new vendor is granted the Stamped Envelope contract.

Several factors influence manufacturing costs, including the envelope size (10" or 6 3/4"), envelope style (printed or plain, window or regular, banded or unbanded), and complexity of the "stamp" (single color, multi-colored, or "patch").

1 As can be expected, the more complicated designs require more processing and
2 are therefore more expensive to manufacture.

3 **b. Distribution Costs**

4 Distribution costs are those costs incurred by the Postal Service between
5 the time a shipment leaves the manufacturer's dock until a post office or Postal
6 Distribution Center receives the shipment. Test year distribution costs are
7 modeled for those Stamped Envelopes shipped to postal facilities.

8 Plain envelopes are shipped in cartons of 500, 1000, 1500, 2500, and
9 5000 (6 $\frac{3}{4}$ " only) envelopes. The average plain Stamped Envelope order is
10 shipped in a carton of 2500 envelopes. Thus, distribution costs in the plain
11 Stamped Envelope model are based on a 2500-count carton.

12 Distribution costs are made up of three components. (1) A trucking
13 contractor transports plain Stamped Envelope cartons directly from the
14 Westvaco manufacturing facility in Williamsburg, Pennsylvania to a Destinating
15 Bulk Mail Center (DBMC) for deposit into the mailstream. After arriving at the
16 DBMC, the envelope cartons are (2) processed and (3) transported to a delivery
17 unit.

18 Average transportation costs for plain envelopes shipped to a DMBC were
19 derived from invoices for plain enveloped shipments made over a four-week
20 period in FY 1998. A test year cost per envelope was obtained by adjusting
21 base year costs with the test year Consumer Price Index. Mail processing cost
22 estimates were developed using Postal Service witness Eggleston's Parcel Post
23 mail processing model (USPS-T-26) (see USPS-T-29 Campbell Workpaper III).

1 Witness Eggleston's Parcel Post transportation model was used to calculate
2 transportation costs from the DBMC to a delivery unit. See USPS-T-26,
3 Attachment O for a discussion of the model as it relates to Stamped Envelopes.
4 See USPS LR-I-160, Section H for total distribution costs.

5 **c. Selling Costs**

6 Selling costs are those costs incurred by the Postal Service when a
7 customer makes a Stamped Envelope purchase either at a post office window
8 (plain envelopes) or through the Philatelic Fulfillment Service Center (printed
9 envelopes). Selling costs for plain and printed envelopes are treated separately
10 below.

11 Plain Stamped Envelopes are sold individually, in banded sets of five, and
12 in bulk quantities (500, 1000, 1500, 2500, and 5000 counts). Selling costs vary
13 according to the number of envelopes sold per transaction. The more envelopes
14 that are sold in a single transaction, the lower the selling cost per envelope.
15 Because of this fact, the Postal Service offers a discount for plain Stamped
16 Envelopes sold in bulk. Thus, two selling costs for the test year are needed –
17 one for bulk sales and another for single sales.

18 Test year CRA window costs for Stamped Envelopes were allocated to
19 plain and printed envelopes based on FY98 IOCS tally data (see USPS-T-29
20 Campbell Workpaper III). Plain envelope volumes for single and bulk sales were
21 then estimated using FY98 volume ratios. Using the average envelope
22 quantities sold per transaction, the total number of transactions was determined
23 for both single sales and bulk sales. An average selling cost per transaction was

1 then estimated, followed by the average selling cost per envelope for both single
2 and bulk sales (see USPS LR-I-160, Section H).

3 Printed envelopes are sold only in bulk quantities and therefore only
4 require one selling cost. The test year selling cost per envelope for printed
5 envelopes was estimated by using the same procedure as for plain envelopes.

6 4. Modeled Cost Results

7 Test year costs for plain Stamped Envelopes are shown in Table 5 and in
8 Table 6 for printed Stamped Envelopes.

Table 5 Test Year Plain Stamped Envelope Costs

DESCRIPTION	SIZE/STYLE	BOX LOT OF 500 COST	SINGLE ENV COST
PLAIN 6 3/4			
- ITEM #2627	6 3/4 regular	\$7.51	\$0.0615
- ITEM # (2634)	6 3/4 regular	\$9.08	\$0.0647
- ITEM #2637 (2663)	6 3/4 regular	\$7.15	\$0.0608
- ITEM #2639 (2633)	6 3/4 regular	\$9.27	\$0.0651
- ITEM # (2635)	6 3/4 window	\$10.32	\$0.0672
- ITEM #2638 (2665)	6 3/4 window	\$8.17	\$0.0629
- ITEM #2630 (2650)	6 3/4 banded		\$0.0679
- ITEM #2640 (2660)	6 3/4 banded		\$0.0637
PLAIN 10			
- ITEM # (2136)	10 regular	\$10.46	\$0.0675
- ITEM #2151	10 regular	\$9.39	\$0.0653
- ITEM #2152	10 regular	\$10.65	\$0.0678
- ITEM #2153	10 regular	\$9.39	\$0.0653
- ITEM #2154 (2163)	10 regular	\$8.98	\$0.0645
- ITEM #2156 (2166)	10 regular	\$10.03	\$0.0666
- ITEM #2159 (2128)	10 regular	\$11.10	\$0.0687
- ITEM #2171 (2173)	10 regular	\$10.22	\$0.0670
- ITEM #2198	10 regular	\$11.33	\$0.0692
- ITEM # (2137)	10 window	\$11.52	\$0.0696
- ITEM #2155 (2165)	10 window	\$10.06	\$0.0666
- ITEM #2157 (2167)	10 window	\$11.52	\$0.0696
- ITEM #2110 (2140)	10 banded		\$0.0673
- ITEM #2120 (2130)	10 banded		\$0.0716
PLAIN HOLOGRAM 10			
- ITEM #2197	10 hologram	\$16.60	\$0.0797

Table 6 Test Year Printed Stamped Envelope Costs

DESCRIPTION	SIZE/STYLE	BOX LOT OF 500 COST	BOX LOT OF 50 COST
PRINTED 6 3/4			
- ITEM #2627	6 3/4 regular	\$11.70	
- ITEM # (2634)	6 3/4 regular	\$13.00	
- ITEM #2637 (2663)	6 3/4 regular	\$11.34	
- ITEM #2639 (2633)	6 3/4 regular	\$13.48	
- ITEM #2628	6 3/4 window	\$12.77	
- ITEM # (2635)	6 3/4 window	\$14.09	
- ITEM #2638 (2665)	6 3/4 window	\$12.37	
PRINTED 10			
- ITEM # (2136)	10 regular	\$14.61	
- ITEM #2151	10 regular	\$13.42	
- ITEM #2153	10 regular	\$13.42	
- ITEM #2154 (2163)	10 regular	\$13.00	
- ITEM #2156 (2166)	10 regular	\$14.05	
- ITEM #2159 (2128)	10 regular	\$15.14	
- ITEM #2161 (2168)	10 regular	\$11.41	
- ITEM #2162 (2169)	10 regular	\$14.25	
- ITEM #2171 (2173)	10 regular	\$14.25	
- ITEM #2198	10 regular	\$15.37	
- ITEM # (2137)	10 window	\$15.55	
- ITEM #2152	10 window	\$14.67	
- ITEM #2155 (2165)	10 window	\$14.09	
- ITEM #2157 (2167)	10 window	\$15.55	
PRINTED HOLOGRAM			
- ITEM #2197	10 hologram	\$20.70	
PRINTED HOUSEHOLD 6 3/4			
- ITEM # (2621)	6 3/4 regular		\$2.17
- ITEM #2625 (2623)	6 3/4 regular		\$2.02
- ITEM #2626 (2631)	6 3/4 regular		\$2.24
- ITEM # (2622)	6 3/4 window		\$2.29
- ITEM #2629 (2624)	6 3/4 window		\$2.12
PRINTED HOUSEHOLD 10			
- ITEM #2101 (2104)	10 regular		\$2.18
- ITEM #2106	10 regular		\$2.42
- ITEM #2108 (2117)	10 regular		\$2.17
- ITEM #2125 (2127)	10 regular		\$2.40
- ITEM # (2135)	10 regular		\$2.34
- ITEM #2102 (2116)	10 window		\$2.29
- ITEM #2109 (2118)	10 window		\$2.33
- ITEM # (2132)	10 window		\$2.42
PRINTED HOUSEHOLD HOLOGRAM			
- ITEM #2103	10 hologram		\$2.96

1 **IV. QUALIFIED BUSINESS REPLY MAIL DISCOUNT**

2 **A. SCOPE OF ANALYSIS**

3 This section presents the test year mail processing cost avoidance of a
4 Qualified Business Reply Mail piece compared to a handwritten mail piece. This
5 cost avoidance applies to letters and cards and supports the testimony of Postal
6 Service witness Fronk (USPS-T-33).

7 **B. BACKGROUND**

8 As discussed above in Section III, QBRM are those BRM letters and cards
9 which are automation compatible, have both a FIM C and a unique ZIP+4
10 barcode, and have qualified for BRMAS processing. QBRM users currently pay
11 a per-piece accounting fee in addition to postage.

12 The QBRM discount first established as a result of Docket No. R97-1,
13 reflects cost savings, or a cost avoidance, incurred by the Postal Service as a
14 result of "clean" barcoded mail pieces provided by QBRM users. The cost
15 avoidance is defined as the difference in mail processing costs between a
16 preapproved prebarcoded First-Class Mail piece and a handwritten First-Class
17 reply mail piece. The cost avoidance for QBRM pieces is driven by the fact that
18 handwritten reply mail pieces incur additional costs as they are processed
19 through the Remote Bar Coding System (RBCS). The models initially developed
20 in Docket No. R97-1 (USPS-T-23) encompass mail processing costs up to the
21 point where each mail piece receives its first barcoded sortation on a BCS.

1 C. COST METHODOLOGY

2 The cost methodology presented in this testimony is relatively unchanged
3 from the one presented in Docket No. R97-1. The cost avoidance is still defined
4 as the difference in mail processing costs between a preapproved prebarcoded
5 First-Class Mail piece and a handwritten First-Class Mail piece. The mail flow
6 models presented here (see USPS LR-I-160, Section L), however, have been
7 expanded to incorporate mail processing costs through the incoming secondary
8 operation and are consistent with the model presented in this docket by Postal
9 Service witness Miller (USPS-T-24) for letters and cards. By making some
10 simple assumptions that are presented below (see Table 7), witness Miller's
11 model has been easily adapted for modeling QBRM and handwritten mail flows.
12 For a complete discussion of the mail flow models, see witness Miller's testimony
13 (USPS-T-24).

Table 7 QBRM and Handwritten Single Piece Model Assumptions

	QBRM	Handwritten Single Piece
Entry Point	Outgoing primary auto	Outgoing RCR
CRA Adjustment Factor⁷	1.22 (non-auto presort)	1.22 (non-auto presort)
Mail Flow Densities	Developed from Density Study. See Docket No. R2000-1, USPS-T-24, Appendix IV. ⁸	Developed from Density Study. See Docket No. R2000-1, USPS-T-24, Appendix IV.

⁷ The CRA adjustment factor for "non-automation presort" is used here instead of the "automation non-carrier route presort" CRA adjustment factor. Operations for non-automation presort mail more closely resemble those for QBRM and handwritten single-piece mail. See USPS-T-24, Appendix I, page I-4 for the CRA adjustment factor derivation.

1 **D. QBRM COST AVOIDANCE**

2 The modeled test year cost avoidance of a QBRM mail piece is 3.38
3 cents, using a handwritten single-piece letter as a benchmark (see USPS LR-I-
4 160, Section L). Improvements in RBCS character recognition have lowered the
5 cost associated with handwritten single-piece processing and, as a result, have
6 shrunk the cost avoidance incurred by a QBRM mail piece despite an expanded
7 model.

8 **V. ADDITIONAL COST STUDIES**

9 **A. PICKUP SERVICE**

10 **1. Scope of Analysis**

11 This section presents the estimated test year costs of providing pickup
12 service for Express Mail, Priority Mail, and Standard Mail (B) service. These
13 costs serve as a basis for the fees proposed by Postal Service witness Robinson
14 (USPS-T-34).

15 **2. Background**

16 For a fee, pickup service is available for Express Mail, Priority Mail, and
17 Standard (B) service on an on-call or scheduled basis. In Docket No. R97-1,
18 Postal Service witness Nelson utilized data from carrier/messenger surveys to
19 support a new approach to calculate costs for on-call and scheduled pick-ups
20 (Docket No. R97-1, USPS-T-19, Exhibit USPS-19E), replacing the previous use

⁸ Densities for QBRM are assumed the same as the general First-Class Mail flow densities, with one exception. It is assumed that 100 percent of the QBRM from the Incoming MMP operation flows to the SCF/Incoming Primary operation.

1 of messenger delivery costs. Witness Nelson's approach was adopted by the
2 Commission, and implemented in PRC Op. R97-1, PRC LR-4.

3 **3. Cost Methodology**

4 I have updated witness Nelson's cost methodology (Docket No. R97-1,
5 USPS-T-19, Exhibit 19E) using test year piggyback factors and wage rates (see
6 USPS LR-I-160, Section I).

7 **4. Cost Results**

8 The estimated test year costs per pickup are \$9.98 for on-call pickup and
9 \$9.20 for scheduled pickup (see USPS LR-I-160, Section I).

10 **B. EXPRESS MAIL RATE CATEGORY COST DIFFERENTIALS**

11 **1. Scope of Analysis**

12 This section updates the estimated test year per-piece cost differentials
13 across Express Mail rate categories. Witness Plunkett (USPS-T-36) considered
14 these cost differentials when developing rates for Express Mail.

15 **2. Background**

16 Express Mail Service maintains four rate categories, namely (1) Post
17 Office-to-Post Office, (2) Post Office-to-Addressee, (3) Same Day Airport, and
18 (4) Custom Designed. In Docket No. R97-1, witness Nelson (Docket No. R97-1,
19 USPS-T-19) developed a methodology based on differences between rate
20 categories with respect to delivery-related costs. Nelson utilized data from
21 carrier/messenger surveys to support the new approach. The Commission

adopted witness Nelson's new cost methodology and implemented the proposal in PRC Op. R97-1, PRC LR-5.

3. Cost Methodology

I have updated witness Nelson's cost methodology (Docket No. R97-1, USPS-T-19, Exhibit 19D) using test year piggyback factors and wage rates (see USPS LR-I-160, Section J).

4. Cost Results

Estimated test year cost differentials between Express Mail rate categories are shown in Table 8 below.

Table 8 Cost Differentials Across Express Mail Rate Categories

Rate Category	Delivery-Related Cost per Piece	Cost per Piece Differential From Mean
PO-to-PO	\$0.132	(\$1.751)
PO-to-Addressee	\$1.906	\$0.023
Same Day Airport	\$0.132	(\$1.751)
Custom Designed	\$0.420	(\$1.463)

C. NONLETTER-SIZE BUSINESS REPLY MAIL

1. Scope of Analysis

This section updates the estimated test year costs for weight averaging, an alternative method currently used by the Postal Service to count, rate, and bill nonletter-size BRM.

2. Background

Weight averaging is a statistical method used by the Postal Service as an alternative to the standard piece-by-piece method of counting, rating, and billing

1 nonletter-size BRM. The weight averaging daily procedures involve bulk
2 weighing each customer's incoming BRM pieces, estimating postage using a
3 postage-per-pound conversion factor, billing each customer using a special
4 computer screen in the PERMIT system, and recording each customer's daily
5 activity. Each AP, a sample of pieces is taken for use in updating the conversion
6 factors, which are used until the next sample is taken. See Docket No. MC99-2,
7 USPS-T-3 for a detailed description of these activities.

8 BRM recipients who qualify for nonletter-size BRM fees pay a per-piece
9 fee, plus a monthly fee to cover sampling and accounting costs.

10 3. Cost Methodology

11 The cost methodology for weight averaging incorporates both volume
12 variable and fixed costs based on a two-week data collection period at three
13 sites (see Docket No. MC99-2, USPS-T-3). The cost model contains three
14 components based on specific activities. One activity is volume-variable while
15 the other two activities are fixed. First, daily bulk weighing is dependent on the
16 volume received and translates into a per-piece cost. Second, daily billing and
17 accounting activities do not vary by daily volume and translate into a fixed cost.
18 Lastly, periodic sampling is not dependent on the daily volume received and is
19 considered a fixed cost incurred each accounting period.

20 4. Cost Results

21 Updated costs are shown in Table 9 below using the above methodology
22 and incorporating test year piggyback factors and wage rates (see USPS LR-I-
23 106, Section K).

Table 9 Test Year Nonletter-size BRM Costs

Type of Cost	Test Year Cost
Per Piece	\$0.0057
Monthly Accounting	\$498.40

APPENDIX 1: BRM RATING AND BILLING STUDY

1 Introduction

2 In Docket No. R97-1, BRM costs were based in part on the distributions of billing
3 methods by rate element reported in Table 16 of Docket No. R97-1, USPS LR-H-179.
4 These distributions were based on survey data collected in the fall of 1996. At that time,
5 20.4 percent of all BRM volume was billed using the PERMIT system. Since that time,
6 the percentage of offices using the BRM module of the PERMIT system has increased
7 substantially. For example, of the 446 offices responding to the BRM Practices Survey
8 in 1996, only 80 offices used PERMIT for billing purposes in FY96. By FY98, 217 of
9 these 446 offices were recording transactions in the BRM module of PERMIT.

10 In the summer of 1999 the Postal Service sponsored a survey to update the distributions
11 of billing practices used for BRM. Thirty-three offices that responded to the 1996 BRM
12 Practices Survey and recorded BRM transactions in PERMIT in FY98 were randomly
13 selected. Each office was contacted by telephone, and postal personnel familiar with
14 BRM practices were questioned concerning the use of the BRM module at their office.
15 The results of this survey were used to update the original distributions of billing
16 methods reported in the BRM Practices Survey.

17 Survey Methodology

18 The universe of offices for this survey consists of the offices that had responded to the
19 1996 survey on BRM practices and that were reporting BRM transactions in the BRM
20 module of PERMIT in the first three quarters of FY98. Of the 446 offices that responded
21 to the 1996 survey, 217 recorded BRM transaction in PERMIT in FY98. To increase
22 sampling efficiency, the universe was grouped into three strata: those offices that used
23 the PERMIT system for billing in 1996, those offices that billed using BRMAS in 1996,
24 and all other offices. Each stratum was substratified using the stratification
25 methodology originally used in the 1996 survey. This stratification methodology was
26 designed to group together facilities that are likely to sort and rate BRM using like
27 methods.⁹

28 Given time and cost constraints, it was determined that a sample size of thirty offices
29 was feasible. The sample size was allocated across strata so that the majority of
30 sample observations would come from the strata that contained offices using manual
31 billing methods. Within each strata, the sample size was allocated to substrata
32 proportional to FY98 BRM volume (as reported in PERMIT). In order to ensure that at
33 least one sample office was selected in each substrata that had offices using the BRM
34 module of PERMIT in FY98, the sample size was increased to 33.

35 Information on the survey universe is shown in Table 1 below.

⁹ Facilities were assigned to strata by the following criteria: Processing and Distribution Center or Facilities, facilities having at least one piece of automation equipment, facilities reporting revenues in the BRM module of PERMIT, facilities reporting BRM revenue in the National Consolidated Trial Balance. Facilities were assigned to substrata based on whether they reported using only manual counting methods in the preliminary survey (see Docket No. R97-1, USPS LR-H-179, section 4a and 4b for details).

Table 1: BRM Billing Practices Survey – Stratification

<u>Strata</u>	<u>Substrata</u>	<u>Number of offices</u>	<u>FY98 BRM Volume</u>	<u>Sample Size</u>
PERMIT	3	46	27,801,740	2
	5	18	36,370,459	2
	11	16	149,876,564	2
BRMAS	3	4	129,377	1
	5	1	4,341	1
	11	6	58,254,352	1
Other	1	2	1,810,153	1
	2	1	728	1
	3	37	34,324,311	9
	4	11	4,480,721	1
	5	13	5,442,413	1
	6	4	52,381	1
	7	0	0	0
	8	11	2,655,530	1
	9	6	706,111	1
	10	11	4,104,293	1
	11	30	27,474,548	7
Total		217	353,488,022	33

Each sample office was contacted by telephone, and the person most familiar with BRM billing practices was interviewed. This person was typically the BRM unit supervisor or a BRM clerk familiar with the BRM billing practices used at the sample office. This person was asked to describe how the office is currently using the PERMIT system for recording daily BRM activities. In particular, each office was asked whether they are actually using the PERMIT system to calculate postage due and to prepare bills for the customer. Responses were obtained from all sample offices.

Results

The revised BRM billing practices are reported in Table 2 below. These results were obtained using the inflation process described in the next section.

Table 2 Profile of BRM Billing Practices – How Mailer Bills are Generated (Updated 8/99)

	<u>BRMAS-rated</u>	<u>Percent of Volume</u>		<u>Total</u>
		<u>Non-QBRM Advance Deposit</u>	<u>Non-Advance Deposit</u>	
BRMAS	6.5%	0.5%	0.4%	3.6%
Locally-developed software	5.7%	3.7%	2.3%	4.7%
Manual*	43.6%	55.5%	72.1%	50.4%
ADBR software	1.0%	1.2%	0.5%	1.0%
PERMIT	40.9%	38.0%	23.9%	38.6%
Other	2.4%	1.1%	0.8%	1.7%
Total	100%	100%	100%	100%

*Includes IRT sticker on bill, meter strip, and handwritten bills.

1 As these results show, the percent of BRM pieces billed using the BRM module of the
 2 PERMIT system is now 38.6 percent, which is substantially higher than in 1996, when
 3 only 20.4 percent of BRM pieces were billed using the PERMIT system.

4 **Inflation Process**

5 The inflation process involved updating the office-specific billing practices distribution
 6 from the 1996 survey with updated estimates based on the new survey for the offices in
 7 the current survey's universe, and then inflating the data using the method described
 8 below (which is the same method reported in Docket No. R97-1, USPS LR-H-179,
 9 section 4e).

10 For each respondent, the percent of BRM volume (by rate element, by billing method
 11 used) was determined based on information obtained in the telephone interview. Within
 12 each substrata, a weighted average of the distribution of billing methods for the sample
 13 offices was obtained. This weighted average was then applied to each of the non-
 14 sample offices in the survey universe, by substrata. The billing practices data for the
 15 229 offices that responded to the original 1996 survey but were not included in this
 16 study (i.e., those offices not reporting BRM transactions in PERMIT in FY98) were not
 17 updated. The billing method distributions data were then inflated using the process as
 18 described in Docket No. R97-1, USPS LR-H-179, section 4e.

19 Individual responses given in percentages were changed to levels, using facility BRM
 20 volume (by rate element). Facility levels were summed to sub-strata totals. Since the
 21 sampled sites from all sub-strata were chosen to be representative of their strata, the
 22 sub-strata responses were inflated to obtain estimates for the universe. Responses (in
 23 levels, by strata) were rolled up to a universe total, using the following inflation factors
 24 as weights:

$$25 \quad \text{For sub-strata 1,2,4,5: } weight_i = \left(\frac{W_i + X_i}{Z_i} \right) \left(\frac{NM_i}{(M_i + NM_i)} \right) \left(\frac{N_i}{NM_i} \right)$$

$$26 \quad \text{For sub-strata 6,7,9,10: } weight_i = \left(\frac{W_i + X_i}{Z_i} \right) \left(\frac{M_i}{(M_i + NM_i)} \right) \left(\frac{N_i}{M_i} \right)$$

$$27 \quad \text{For sub-strata 3: } weight_i = \left(\frac{W_i + X_i}{Z_i} \right) \left(\frac{NM_i}{(M_i + NM_i)} \right) \left(\frac{P_i}{PR_i} \right)$$

$$28 \quad \text{For sub-strata 8: } weight_i = \left(\frac{W_i + X_i}{Z_i} \right) \left(\frac{M_i}{(M_i + NM_i)} \right) \left(\frac{P_i}{PR_i} \right)$$

where:

N_i =number of facilities in BRM universe

W_i =number of sites responding to preliminary survey

X_i =number of sites responding to preliminary survey after selection of Practices sample sites

M_i =number of "manual" sites

NM_i =number of "non-manual" sites

P_i =total BRM revenues in PERMIT (302 facilities)

PR_i =BRM revenues in PERMIT for Practices Survey respondents

Z_i =number of sites responding to Practices Survey

i =sub-strata.

For sub-strata 11, no previous volume information was available to develop inflation factors since this strata was not included in the preliminary survey and the BRM volumes for these sites were not available from another source. In order to develop an inflation factor, an estimate of BRM volumes for non-responding sample sites was needed. A model of BRM volumes for all plants (i.e., for facilities in strata 5) was estimated through a regression of number of stations and accounting revenue on BRM volumes. This model was estimated over sub-strata 5 and 10 facilities, which responded to the Practices Survey. This model was then used to estimate BRM revenues for the non-respondent sample sites in sub-strata 11. Total BRM revenue for sub-strata 11 was then estimated by summing revenues from respondent sites and estimated revenues from the non-respondent sites. The inflation factor for sub-strata 11 is therefore:

$$\frac{(\text{BRM revenue from respondent sites} + \text{estimated BRM revenue for non-respondent sites})}{\text{BRM revenue from respondent sites}}$$

Inflated sub-strata levels were summed to strata totals. National estimates were obtained by taking a weighted average across all strata results, with volumes (total BRM or rate element volumes, depending on the nature of the question) as weights.

The distribution of volume of BRM pieces by rate element obtained from the survey (after rolled-up to universe) differed from that reported in the GFY 1996 RPW reports. The difference between these two distributions was that sample sites on average reported a higher percentage of non-advance deposit BRM pieces than was reported in RPW. Of all advance deposit account volume, the percentage of BRMAS-rated mail was about the same in both: 55 percent in RPW, 54 percent in the Practices Survey sample (inflated).

Because of this difference in the distribution of BRM volume across rate elements, the sample distribution of BRM volume by rate element was controlled to the corresponding RPW distribution (after inclusion of controlled strata 3 pieces). Strata 3 piece distribution across rate element was controlled separately to the rate element distribution in 1996 PERMIT data.

- 1 The average daily volumes in RPW and in the sample, and the control factors
 2 determined, are:

Rate element	RPW pieces	Sample pieces	Control factor	PERMIT revenue, strata 3 facilities	Strata 3 respondent revenue	Control factor
BRMAS-rated	1,692,198 (51.9%)	3,088,493 (48.4%)	0.5196	221,229 (56.4%)	257,694 (56.9%)	0.8585
Non-QBRM advance deposit	1,368,364 (42.0%)	2,614,114 (41%)	0.4907	165,665 (42.3%)	162,887 (36.0%)	1.0171
Non-advance deposit	197,423 (6.1%)	677,784 (10.6%)	0.2981	5,065 (1.3%)	32,439 (7.2%)	0.1561

- 3 As this table indicates, volume levels differed considerably between survey
 4 responses (rolled-up to universe) and RPW (BRM volumes in RPW are also based
 5 on survey data). Several things could influence this discrepancy. Most sites do not
 6 keep records of volumes (only of postage), and so had to estimate¹⁰ these data. In
 7 addition, the survey question asked for average daily volume, and many mailers
 8 receive seasonal or periodic mailings, e.g., proxies, magazine subscriptions linked
 9 with advertising campaigns (although the survey was conducted at a time not
 10 generally believed to be one with high seasonal volumes). Although the levels
 11 differed, it should be noted that the distribution across rate element were similar.
 12 Given that the information of interest from this survey was the distribution of
 13 practices associated with BRM, the difference in volume levels does not, by itself,
 14 cast doubt on the results reported here.
- 15 The final results presented here have been controlled to RPW totals.

¹⁰ It was determined that it would be too onerous on the field to ask them to collect volume data for a statistically-valid sample period at the time of year the survey was conducted.

APPENDIX 2: CALLER SERVICE STUDY METHODOLOGY

CALLER SERVICE COST STUDY METHODOLOGY

1.0 Purpose

The purpose of this study is to estimate the costs of providing Caller Service (CS) to each caller box number or caller separation. In addition, the study is used to estimate the cost of providing a reserved caller box number.

2.0 Sample Design

2.1 Introduction

Caller Service allows customers to pickup mail at both delivery units and Processing and Distribution Centers. The universe under study consists of those facilities having at least one CS customer. A 1996 Post Office Box survey identified 5,414 out of 25,592 sites having at least one CS customer. See Docket No. MC96-3, LR-SSR-113. These 5,414 facilities are the sampling units making up the sampling frame.

All calculations in this study were completed using Microsoft Excel.

2.2 Stratum Design

The first step in designing strata for this study involved sorting the 5,414 data records in ascending order by number of CS customers. The sort showed that 32 sites have more than 500 CS customers each, nearly 22 percent of the total CS customers in the universe. Because these sites have large numbers of CS customers, it is highly desirable to include them in the study. One stratum (S_5) was devoted entirely to these high volume sites.

The remaining 5,382 sites required further stratification to account for variable CS customer numbers throughout the sampling frame. Nearly 75 percent of the sites have 10 or fewer CS customers, while the remaining 25 percent have as many as 1000 CS customers. Stratifying the sampling frame establishes sub-populations, each of which is internally homogeneous (*Sampling Techniques*, Cochran, p. 90, 1977). The desired effect is a gain in precision in the estimates of characteristics of the whole population.

It can be shown that little reduction in variance can be realized by using more than six strata (Cochran, p. 133, 1977). Based upon this fact and the desire to minimize the number of strata, it was decided that a total of five strata would be optimal. Hence, the remaining 5,382 sites were placed into four strata. These four strata were constructed using Neyman allocation (Cochran, pp. 127-133, 1977). This was done by first using the FREQUENCY function in Microsoft Excel to determine where natural breaks occur within the sampling frame, to the extent that group CS customer numbers were on the same order of magnitude. Since the ranges of CS customer numbers are not equal, an adjustment factor was required to account for the range change from group to group. When the first group changes from one of length d to one of length ud , the value of $(f)^{(5)}$ for the second group is multiplied by $(u)^{(5)}$. The root($f * u$) is then summed cumulatively as shown in Table 1.

Table 1: Stratum Design

group	Frequency (f)	range	u	root(f*u)	cumulative root(f*u)	Breakpoint	strata
1	1386	1	1.0	37.23	37.23		S ₁
2	2642	8	8.0	145.38	182.61	***	S ₁
3	970	29	29.0	167.72	350.33	***	S ₂
4	240	59	59.0	119.00	469.33	***	S ₃
5	119	199	199.0	153.89	623.21		S ₄
6	25	199	199.0	70.53	693.75	***	S ₄

For optimum strata design, the overall cumulative root (693.75) is divided by the number of desired strata, four in this case. The closest cumulative root to this quotient (173.45) is 182.61, which becomes the breakpoint for the first stratum. The next breakpoint is determined by doubling 173.45 and finding the closest cumulative root (350.33). Tripling 173.45 results in a 469.33 breakpoint, and so on. Thus, groups falling within the breakpoints (denoted by '***' in Table 1) define the first four strata, denoted as S₁, S₂, S₃, and S₄. The fifth stratum (S₅) was defined earlier as the 32 high-volume sites.

2.3 Sample Size Determination

Neyman allocation was used here to determine the sample size taken within each stratum. This method of allocation is typically used when there is a great difference between stratum sizes and a large variation between stratum variances (*Elementary Sampling Theory*, Yamane, p. 148, 1967). Assuming equal sampling costs among strata, Neyman allocation suggests taking more from the large strata and from strata that are more heterogeneous. The calculation, as detailed by Yamane (pp. 136-138, 1967), follows:

$$n_h = \frac{N_h S_h * n}{\sum N_h S_h}$$

where:

- n_h = the total number of units to be sampled from stratum h
- n = the total number of units to be sampled across all strata
- N_h = the population sample size in stratum h
- S_h = the standard deviation of variable x, in stratum h, where x is CS customer numbers

The above calculation was performed for strata 1-4 with a total sample size n=100. Table 2 presents each parameter and the number to be sampled within each stratum.

Table 2: Sample Size Determination

	N _h	S _h	N _h *S _h	n _h
s ₁	4028	2.52	10,134.09	27
s ₂	970	8.01	7,774.51	21
s ₃	240	16.12	3,868.96	10
s ₄	144	110.41	15,899.12	42
TOTALS	5382	137.06	37,676.68	100

2.4 Sample Selection

A random sample was taken within each stratum defined above. This procedure is detailed as follows:

1. The sample frame for each stratum was sorted by 5-digit ZIP Code in an Excel spreadsheet. Each 5-digit ZIP Code corresponds to a postal facility's Caller Service ZIP.
2. Another worksheet was established to select random numbers using Excel's RANDBETWEEN function. Random numbers were chosen for each stratum to correspond with specific line numbers in the sample frame.
3. Excel's LOOKUP function was utilized to "lookup" the ZIP Code corresponding to the randomly selected line numbers. The randomly selected ZIP Codes were arranged by stratum in a worksheet for strata 1-4. These ZIP Codes were then matched with specific postal facilities.

3.0 Survey Implementation

The CS survey was conducted in two phases. Phase I consisted of a mailing sent to all 132 sites selected for the study. The Spring 1999 mailing included a brief description of the study and requested that each site forward a complete listing of all its CS customers (see Attachment 1) for a Phase I survey). Exactly 122 sites returned the survey, a 92.4 percent response rate. 83 out of 122 respondents reported having one or more CS customers. Ten CS customer names were then selected from each CS customer list for data collection purposes in Phase II. If a particular site had fewer than ten customers, then that site was to collect data for all its customers.

Phase II was conducted over a four-week period in late-Spring 1999. The 83 sites with CS customers were divided into four groups, with each group assigned one of four weeks for data collection. Four consecutive weeks were chosen to capture any cyclical trends occurring over a month's time. Each site was sent the attached Phase II survey packet (see Attachment 2 for Phase II survey), including survey instructions and forms. The participating sites were instructed to return the forms back to headquarters following data collection. Phase II resulted in an 80.7 percent response rate.

4.0 Data Collection

The Phase II survey (see Attachment 2) contained four parts, each corresponding to specific CS information. The purpose of Part 1 was to collect basic CS data including the total number of CS customers and separations at each site as well as the pick-up frequency of CS customers. Part 2 requested that each site record the total storage space required for CS mail. Storage areas included tables, pouch racks, hampers, cases, and floor space (platform and box section). These data were used to calculate an annual cost of storage per caller number. Part 3 requested participants to record volume and time information related to CS billing and rent collection (i.e., accounting). These data were used to calculate an annual window accounting cost per caller number. In Part 4, each site recorded the total time required to retrieve mail for 10 CS customers

pre-selected from each site's CS customer list. If a site had less than 10 CS customers, then they were asked to record data for all its customers. These data were used to calculate the annual retrieval cost per caller number.

5.0 Data Entry

When each completed survey packet was received at headquarters, the data was reviewed for completeness and logged into a Microsoft Access database. The data was later transferred to an MS Excel file for analysis (see USPS-T-29 Campbell Workpaper IV).

6.0 Data Analysis

6.1 Window Service Accounting Costs

The total window service accounting cost is comprised of four activity costs: (1) Form 1091-related activities, (2) posting notices of rent due (Notice 32), (3) collecting rent payments from customers and preparing receipts (Form 1538), and (4) preparing applications for new CS customers (Form 1093). These activities were specifically addressed in Part 3 of the Phase II survey. Study participants were asked to record times for these activities over a one-week period. The total times for these activities are shown in USPS-T-29 Campbell Workpaper IV. These times were derived by totaling the appropriate columns.

Dividing the total minutes for all accounting activities by the total number of callers in the study results in a weekly accounting time per CS customer. By converting the weekly accounting minutes to hours and multiplying by the average hourly clerk wage, the weekly accounting direct cost per CS customer is derived. After annualizing the accounting cost and dividing by the average number of separations per caller, the annual accounting direct cost is determined. Finally, a total annual accounting cost per caller separation was determined by adding indirect costs to direct costs.

6.2 Window Service Retrieval Costs

Study participants recorded the total mail-retrieval time for 10 (or less) CS customers over a one-week period (see Part 4, Attachment 2). The total time for this activity is shown in USPS-T-29 Campbell Workpaper IV. Window service retrieval costs were obtained by first dividing the total retrieval time by the number of customers in the study picking up at the window, resulting in an average weekly retrieval time per customer. This time per customer was then annualized, resulting in an average retrieval time per customer per year. The annual direct/indirect cost per customer was obtained by multiplying the annual direct cost per customer by the average hourly clerk wage and then adding in indirect costs.

6.3 Platform Retrieval Costs

The annual direct/indirect cost per customer for platform mail retrieval was calculated using the same methodology used for window service mail retrieval. See USPS LR-I-160, Section C for detailed calculations.

6.4 Storage Costs

The total square footage at each study site dedicated to CS customer mail was recorded in Part 2 of the Phase II survey (see Attachment 2). The total square footage for all study sites was first determined. An average square footage per firm was then determined by dividing the total square footage by the number of firms as shown in USPS LR-I-160, Section C. The average annual storage cost per firm was then determined by multiplying the average square footage per firm by the facility cost per square foot. Finally, the average storage cost per caller separation was calculated by dividing the average annual storage cost per firm by the average separations per customer.

7.0 Results

The estimated test year cost per separation based on the above data analysis is \$596.04. See Table 3 for a cost summary by activity.

Table 3 Test Year Caller Service Costs

Activity	Annual Cost (direct and indirect)
Window Service Accounting	\$16.57
Window Service Delivery	\$177.86
Platform Delivery	\$292.77
Storage	\$108.85
Total Cost per Caller Number	\$596.04

Attachment 1: Caller Service Study – Phase I

Purpose: The purpose of this study is to determine the cost of callers service to support the fee charged to caller service customers. This study will capture costs related to window service, delivery to customers at windows and platforms, and dedicated space.

Post Office Information:

Site Coordinator _____

Title _____

Post Office _____

ZIP _____

Telephone number _____

FAX _____

In this study, a Caller Service customer is defined as a firm who pays a periodic fee allowing a designated person to pick up the firm's mail at a post office window or loading dock during regular business hours. A firm holdout customer is a customer who, because of high volume, can pick up mail once per day at no charge.

Instructions: In Phase I of the study, please submit a complete listing of your Post Office's caller service customers. Do not include firm holdout customers. From this listing, random customers will be chosen for use in Phase II of the study.

Contact: If you have any questions, please contact Chris Campbell at headquarters at (202) 268-3759.

Please return the survey packet to the following address by March xx, 1999:

Chris F. Campbell
Special Studies
475 L'Enfant Plaza, SW, Rm. 1330
Washington, D.C. 20260-5324

Or **FAX: (202) 268-3480**

Attachment 2: Caller Service Study – Phase II

Thank you for completing Phase I of the Caller Service Study. From the list of Caller Service customers that you provided in Phase I, we selected specific customers for you to track during Phase II (see the Caller Data Collection Worksheet for these customers).

During Phase II, you will collect a variety of data for use in determining the cost of Caller Service. The data are classified into four parts: (1) Caller Service Customer Information, (2) Dedicated Caller Service Space, (3) Window Services, and (4) Window/Platform Delivery. Please read each Part carefully before beginning the data collection. Parts 1 and 2 will be completed just once during the study period, while Parts 3 and 4 will be completed each day during the study period.

Study Period: You should begin collecting data on Wednesday, May xx, 1999 and stop collecting data on Wednesday, May xx, 1999.

In this study, a *Caller Service customer* is defined as a firm who pays a periodic fee allowing a designated person to pick up the firm's mail at a post office window or loading dock during regular business hours. Please **do not** include firm holdout customers. A *firm holdout customer* is a customer who, because of high volume, can pick up mail once per day at no charge.

Please keep track of the hours required to complete Phase II and record on the Hours Record Sheet. These hours will be released to your Post Office at the conclusion of this study.

Please submit your Caller Service Data Forms, Hours Record Sheet, and Caller Data Collection Worksheet to the following address:

**Chris F. Campbell
Special Studies
475 L'Enfant Plaza SW, Rm. 1330
Washington, D.C. 20260-5324**

Contact: If you have any questions, please contact Chris Campbell at headquarters at (202) 268-3759.

Data Forms

Site Coordinator _____

Title _____

Post Office _____

ZIP _____

Telephone number _____

FAX _____

Part 1 – Caller Service Customer Information

A. Please indicate the number of Caller Service customers at your Post Office: _____

B. Please indicate the total number of Caller Service separations at your Post Office: _____

C. Please provide a general estimate of Caller Service customer numbers according to pick-up frequency in the table below. This total should equal the total you entered in Letter A above.

# of customers picking up 1 time per day	# of customers picking up 2 times per day	# of customers picking up 3 times per day	# of customers picking up 4+ times per day	

Part 2 – Dedicated Caller Service Space Calculation

This part is used to determine the total dedicated square footage (storage area) for all Caller Service customers. Do not include storage area for firm holdouts or "vacation hold mail."

Use the worksheet below to calculate total square footage. Round to the nearest square foot.

Storage Area	Square Footage
Table(s)	
Pouch rack and/or hamper	
Case	
Floor space (inside or adjacent to the box section area; exclude space used for lock boxes)	
Floor Space (platform area)	
Other (identify)	
TOTAL	

Part 3 – Window Services

This part is used to record volume and time information related to Caller Service billing and collection. Record all times to the nearest minute.

A. Do you use WinBATS to track Caller Boxes?

YES NO

If NO, will you get WinBATS in the future?

YES NO

Estimated date of WinBATS installation _____

B. Record the number of **Form 1093's** (Application for Caller Service) prepared for new Caller Service customers during the test period and record the time to complete the forms. **If using WinBATS** for this activity, record the number of 'New Customer – Box Issue' screens that are completed each day and the times required to complete them.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Volume								
Time								

C. Record the number of **Form 1091's** (Register for Caller Service) reviewed during the test period for Caller Service only. **If using WinBATS** for this activity, record the number of times a 'Caller Due' screen is reviewed each day.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Volume								

D. Record the times required for Form 1091-related activities (Caller Service only).

Activity								
Review Form 1091 or WinBATS to determine rents due								
Enter receipt number and other data when payment is made								
Enter "discontinued service" on form or in WinBATS								
Window and telephone inquiries related to rent due								
Prepare Form 1091 or WinBATS screen with related data for new Caller Service customers								
TOTALS								

- E. Record the number of **Notice 32's** (Notice of Rent Due) and the time required to hand notices to Caller Service customers during the test period.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Volume								
Time								

- F. Record the time required to complete and issue **Form 1538** (Receipt for Caller Service Fees) to Caller Service customers during the test period.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Volume								

- G. Do you use POS to issue Receipts for Caller Service Fees?

YES NO

Part 4 — Window/Platform Delivery

This part is for those clerks responsible for delivering caller mail at either a window or platform.

Instructions: Use the attached **Caller Data Collection Worksheet** to record delivery times for each selected caller during the test period. Delivery time includes the time to deliver the caller's mail from the storage area to the window or platform and to return to the duty area. Please include any clerk or mail handler time spent loading the customer's vehicle. Transfer the totals into the table below at the end of each day.

Activity								
Time to deliver caller mail at the window								
Time to deliver caller mail at the platform								
TOTAL								

Caller Data Collection Worksheet

61611

[illegible]

Please return this worksheet with your survey. Make additional copies as needed.